

October 2025 - KACO starts series production of the new generation of pressure compensation elements – reliable venting solution for electric drives

With the new generation of pressure equalization elements, KACO presents an innovative solution for reliable housing ventilation in electric drive systems.

The new solution is already successfully in use in a first series project and addresses known weaknesses of conventional systems - particularly with regard to the clogging risk from oil mist and limited resistance to pressure and water.



Fig. 1 and 2: New generation of pressure equalization elements

Electric drive units are subject to extreme temperature and pressure fluctuations during operation. Particularly at high temperatures, a fine oil mist is produced, which leads to deposits on the diaphragm of conventional pressure compensation elements and thus to a loss of function.

By intelligently separating the valve functions, KACO has succeeded in keeping the membrane permanently free of oil mist - and at the same time ensuring breathable function with reliable protection against water and dirt. The pressure compensation remains fully functional even under the harshest conditions, significantly increasing the service life and operational reliability of electric drive units.

Functional features

- **Active pressure equalization** in the event of temperature and altitude changes
- **Permanently transparent membrane** - no clogging due to oil or dirt
- **Oil and water-repellent design** with optimized geometry
- **Protection classes IP6K4, IP6K7 and IP6K9** for maximum environmental resistance
- **Scalable system design** - variants available for different load requirements

PRESS RELEASE

The development combines a robust, non-clogging design with reliable protection against water and pressure fluctuations - ideal for use in demanding environments.

KACO GmbH + Co KG, a subsidiary of the Zhongding Group, is one of the world's leading developers and manufacturers of high-precision, application-oriented sealing solutions and electrification components for a wide range of industries. Based in Germany, the company is characterized by the highest sealing quality and innovative strength and stands for recognized development and manufacturing expertise. KACO has six plants in Germany, Austria, Hungary, China and the USA and supplies its products all over the world. As a long-standing partner to the automotive and supplier industry as well as other branches of industry, the company has always kept pace with the high demands and technical changes in the sectors for decades.

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